the FCC, and at least 20 days in advance of the applicant's planned operation. The application must state the date that notification in accordance with paragraph (a) was made. In services in which individual station licenses are not issued by the FCC, the notification required in paragraph (a) of this section should be sent at least 45 days in advance of the applicant's planned operation. In the latter services, the Interference Office must inform the FCC of a notification by an applicant within 20 days if the Office plans to file comments or objections to the notification. After the FCC receives an application from a service applicant or is informed by the Interference Office of a notification from a service applicant, the FCC will allow the Interference Office a period of 20 days for comments or objections in response to the application or notifica-

(c) If an objection to any planned service operation is received during the 20-day period from the Interference Office, the FCC will take whatever action is deemed appropriate.

[63 FR 41203, Aug. 3, 1998]

#### Subpart C—Technical Standards

### §24.50 Scope.

This subpart sets forth the technical requirements for use of the spectrum and equipment in the personal communications services.

### §24.51 Equipment authorization.

(a) Each transmitter utilized for operation under this part and each transmitter marketed, as set forth in §2.803 of this chapter, must be of a type that has been authorized by the Commission under its certification procedure for use under this part.

(b) Any manufacturer of radio transmitting equipment to be used in these services may request equipment authorization following the procedures set forth in subpart J of part 2 of this chapter. Equipment authorization for an individual transmitter may be requested by an applicant for a station authorization by following the procedures set forth in part 2 of this chapter.

(c) Applicants for certification of transmitters that operate in these services must determine that the equipment complies with IEEE C95.1-1991, "IEEE Standards for Safety Levels with Respect to Human Exposure to Frequency Electromagnetic Fields, 3 kHz to 300 GHz'' as measured using methods specified in IEEE C95.3-1991, "Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields—RF Microwave." The applicant for certification is required to submit a statement affirming that the equipment complies with these standards as measured by an approved method and to maintain a record showing the basis for the statement of compliance with IEEE C.95.1-1991.

[58 FR 59183, Nov. 8, 1993. Redesignated at 59 FR 18499, Apr. 19, 1994, as amended at 63 FR 36604, July 7, 1998]

EFFECTIVE DATE NOTE: At 63 FR 36604, July 7, 1998, §24.51 was amended by removing paragraph (b) and redesignating paragraphs (c) and (d) as (b) and (c); by removing from paragraphs (a) and newly redesignated (c) the term "type acceptance" and replacing it with "certification"; and by removing the last sentence from newly redesignated paragraph (b), effective Oct. 5, 1998. For the convenience of the user, the superseded text is set forth as follows:

## $\ensuremath{\$\,24.51} \quad Equipment \ authorization.$

\* \* \* \* \*

(b) The Commission periodically publishes a list of type accepted equipment, entitled "Radio Equipment List, Equipment Accepted for Licensing." Copies of this list are available for public reference at the Commission; offices in Washington, DC, at each of its field offices, and may be ordered from its copy contractor.

(c)\* \* \* Such equipment if approved or accepted will not normally be included in the Commission's Radio Equipment List but will be individually enumerated on the station authorization.

\* \* \* \*

#### §24.52 RF hazards.

Licensees and manufacturers are subject to the radiofrequency radiation exposure requirements specified in §1.1307(b), §2.1091 and §2.1093 of this chapter, as appropriate. Applications for equipment authorization of mobile

or portable devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

[61 FR 41018, Aug. 7, 1996]

# §24.53 Calculation of height above average terrain (HAAT).

- (a) HAAT is determined by subtracting average terrain elevation from antenna height above mean sea level.
- (b) Average terrain elevation shall be calculated using elevation data from a 30 arc second or better Digital Elevation Models (DEMs). DEM data is available from United States Geological Survey (USGS). The data file shall be identified. If 30 arc second data is used, the elevation data must be processed for intermediate points using interpolation techniques; otherwise, the nearest point may be used. If DEM data is not available, elevation data from the Defense Mapping Agency's Digital Chart of the World (DCW) may be used.
- (c) Radial average terrain elevation is calculated as the average of the elevation along a straight line path from 3 to 16 kilometers extending radially from the antenna site. At least 50 evenly spaced data points for each radial shall be used in the computation.
- (d) Average terrain elevation is the average of the eight radial average terrain elevations (for the eight cardinal radials).
- (e) The position location of the antenna site shall be determined to an accuracy of no less than  $\pm 5$  meters in both the horizontal (latitude and longitude) and vertical (ground elevation) dimensions with respect to the National Geodetic Reference System.

[58 FR 59183, Nov. 8, 1993; 59 FR 15269, Mar. 31, 1994]

## §24.55 Antenna structures; air navigation safety.

Licensees that own their antenna structures must not allow these antenna structures to become a hazard to air navigation. In general, antenna structure owners are responsible for registering antenna structures with the FCC if required by part 17 of this chapter, and for installing and maintaining any required marking and lighting. However, in the event of default of this responsibility by an antenna structure owner, each FCC permittee or licensee authorized to use an affected antenna structure will be held responsible by the FCC for ensuring that the antenna structure continues to meet the requirements of part 17 of this chapter. See §17.6 of this chapter.

- (a) Marking and lighting. Antenna structures must be marked, lighted and maintained in accordance with part 17 of this chapter and all applicable rules and requirements of the Federal Aviation Administration.
- (b) Maintenance contracts. Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) may enter into contracts with other entities to monitor and carry out necessary maintenance of antenna structures. Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) that make such contractual arrangements continue to be responsible for the maintenance of antenna structures in regard to air navigation safety.

[61 FR 4366, Feb. 6, 1996]

## Subpart D—Narrowband PCS

### §24.100 Scope.

This subpart sets out the regulations governing the licensing and operations of personal communications services authorized in the 901–902, 930–931, and 940–941 MHz bands (900 MHz band).

## § 24.101 Multiple ownership restrictions.

- (a) Narrowband PCS licensees shall not have an ownership interest in more than three of the 26 channels listed in §24.129 in any geographic area. For purposes of this restriction, a narrowband PCS licensee is:
- (1) Any institutional investor, as defined in §24.720(h), with an ownership interest of ten or more percent in a narrowband PCS license; and
- (2) Any other person or entity with an ownership interest of five or more percent in a narrowband PCS license.